



South Central College

ARCH 1201 Studio 2

Common Course Outline

Course Information

Description An introductory studio course developing a set of working drawings for a light commercial construction project. Course topics include commercial construction principles, commercial terminology, document management, advanced document production and best practices. Emphasis on document production for steel-frame construction and the application of Computer Aided Drafting (CAD) and Building Information Modeling (BIM) software into the design process. An introduction to the incorporation of state and local building code as they pertain to architectural design is included.

Total Credits 4

Total Hours 96

Types of Instruction

Instruction Type	Credits/Hours
Lecture	2/32
Lab	2/64

Pre/Corequisites

ARCH 1101 Studio 1

ARCH 1202 Revit 1 Fundamentals

ARCH 1203 Materials & Methods 2

Institutional Core Competencies

Critical and Creative Thinking - Students will be able to demonstrate purposeful thinking with the goal of using a creative process for developing and building upon ideas and/or the goal of using a critical process for the analyzing and evaluating of ideas.

Course Outcomes

1. Understand the phases of design

Learning Objectives

Review the principal parties involved in the design process

Recognize the phases of design as they pertain to the project
Discuss the primary role and responsibility of the drafting technician in the design process

2. Demonstrate an understanding of light commercial construction

Learning Objectives

Identify light commercial construction materials & methods
Explore building styles used in commercial construction
Identify various terminology used in light commercial construction

3. Coordinate a set of commercial construction documents

Learning Objectives

Define the method of commercial construction used in the project
Research and incorporate industry standard graphics
Recognize applicable building codes as they pertain to the project
Identify information necessary for the coordination of commercial working drawings

4. Produce light commercial construction drawings

Learning Objectives

Draft a Title Sheet
Draft a foundation plan
Draft a reflected ceiling plan
Draft a floorplan
Draft a roof plan
Draft exterior elevations
Draft Interior elevations
Draft building and wall sections
Draft wall-door-frame-window types and schedules
Draft construction details
Draw notes, annotation, symbols, and dimensions required for complete project information
Create a project specific rendering

5. Demonstrate an understanding of space planning applications

Learning Objectives

Develop bubble diagrams
Manage space using walls, partitions, ceilings, and room layout
Analyze space function and relation to other spaces

6. Apply appropriate informational and regulatory resources

Learning Objectives

Research and apply graphic standards
Research and apply applicable building code
Research and implement the ADA regulations
Research and implement the MN Energy Code

7. Implement Computer Aided Drafting (CAD) software

Learning Objectives

Master basic draw and modify commands
Apply advanced architectural tools
Apply advanced annotation tools
Produce accurate output for construction drawings
Utilize project management skills

8. Implement Building Information Modeling (BIM) software

Learning Objectives

Apply basic draw and modify commands
Apply basic model and view tools
Apply basic annotation tools
Produce accurate output for construction drawings
Utilize project management skills

9. Implement of electronic software for drawing coordination

Learning Objectives

Utilize BIM file sharing features

Utilize industry software keep record of communication amongst team members for projects in-progress

Utilize industry software to securely publish project information

10. Develop and apply critical thinking and problem-solving skills

Learning Objectives

Recognize the questions requiring solution

Apply appropriate strategies to achieve a result

Incorporate information judiciously and purposefully

11. Discuss time management skills

Learning Objectives

Cultivate self-starting and resourcefulness

Demonstrate organizational skills

Learn to prioritize tasks to manage workload

Develop alternative study practices to maintain focus

12. Discuss professional workplace practices

Learning Objectives

Ability to integrate various technologies

Proficient in computer software and peripherals

Demonstrate acceptable participation and attendance

SCC Accessibility Statement

Disability Services provides accommodations and other supports to students with permanent and temporary disabilities that affect their SCC experience. Disabilities may include mental health (anxiety, depression, PTSD), ADHD, learning disabilities, chronic health conditions (migraine, fibromyalgia), sensory disabilities, and temporary disabilities (broken arm, surgery). Common accommodations are extended test time, private room for testing, audiobooks, and sign language interpreter.

Contact us: Faribault A116 (507) 332-5847. North Mankato E112 (507) 389-7222. ds@southcentral.edu
www.southcentral.edu/disability

Grading Scale

Each project, quiz, activity, and assignment will have an assigned possible number of points. Points will be awarded based on correctness of work. The total of all points earned will be divided by the maximum possible to determine a percentage. Late assignments will be accepted anytime until the semesters end **Any work handed in late (regardless of duration) will incur a 10% deduct from the grade for that instance.**

Grades will be based on the following percentage of points earned

A 92-100

A- 90-91.9

B+ 87-89.9

B 83-86.9

B- 80-82.9

C+ 77-79.9

C 73-76.9

C- 70-72.9

Note: Grades below 70% will not count towards degree completion, course must be repeated

D+ 67-69.9

D	63-66.9
D-	60-62.9
F	Below 60

Attendance Expectation

Class attendance / participation contributes significantly to academic success. Students who attend classes regularly tend to earn higher grades and have higher passing rates in courses. Excessive absences may jeopardize your grades or even your ability to continue in this course. **Class participation will be part of your grade! The following will apply in all ARCH program courses:**

- An absence is excused ONLY if the student contacts the instructor BEFORE class.
- If you are absent from class for any reason, you are responsible for all missed work and for contacting the instructor promptly.
- Unexcused absences for 3 consecutive class sessions will reduce your final grade by 10% after the first occurrence and automatic course failure after the second occurrence. Overall attendance falling below 50% will result in automatic course failure.
- Online attendance is available at the instructor's discretion. It is reserved for extenuating circumstances and is NOT a replacement for attendance.